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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,290	07/18/2005	Nnochiri N Ekwuribe	014811-215.116	7808

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MOORE & VAN ALLEN PLLC  
P.O. BOX 13706  
Research Triangle Park, NC 27709

EXAMINER
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NWAONICHA, CHUKWUMA O

ART UNIT	PAPER NUMBER
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1621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/525,290

Applicant(s)

EKWURIBE ET AL.

Examiner

Chukwuma O. Nwaonicha

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 27-35 and 37-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26, 36 and 43-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Current Status*

1. Claims 1-47 are pending in the application.

### *Election/Restrictions*

Applicant's election with traverse of Group I in the reply filed on 2/15/07 is acknowledged. Applicants' traversal of restriction requirement is not persuasive because the inventions listed as Groups 1-3 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group 1 is drawn to a compound of formula 1, its pharmaceutical composition and a method of treatment with the same while Groups 2-5 are drawn to different compounds. These five groups of invention are different from each other. Therefore, there is no special technical feature for the compounds, the processes of making these compounds or the different fields of application of the compounds. Also there is no unity of invention. Groups 1-5 require different search strategies that will impose an undue burden on the Examiner.

The requirement is still deemed proper and is therefore made **FINAL**.

Groups 2-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Groups, there being no allowable generic or linking claim. All claims consisting of Group 1 will be examined on the merits. Applicants are reminded of their right to file divisional applications to the non-elected claims.

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Applicants' are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Priority***

Applicants' claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23, 25, 26 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 is indefinite because of the phrase "activated form". It is not clear what structure applicants are claiming. Clarification is required.

Claim 25 is indefinite because of the phrase "biologically active agent". It is not clear what biologically active agent applicants are claiming. Clarification is required.

Claim 26 is indefinite because of the phrase "peptide or protein". It is not clear what peptide or protein applicants are referring. Clarification is required.

Claim 47 is indefinite because of the phrase "a method of treating a subject in need of such treatment". It is not clear what disease or diseases applicants are treating. Clarification is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 46 provide for the method of synthesizing a compound, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a process without any active, positive steps delimiting how this use is actually practiced.

Claim 46 is rejected under 35 U.S.C. 101 because the claimed recitation of a method of synthesizing a compound, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

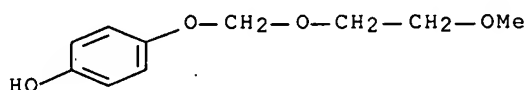
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-16** are rejected under 35 U.S.C. 102(a) as being anticipated by Tsuchihashi et al., {WO 2002102897}.

Tsuchihashi et al. disclose applicant's claimed compound of general formula 1. See the compound in the abstract.

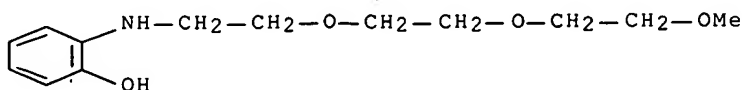
**Claims 1, 2, 4, 7-10, 13, 16 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Kojima et al., {US 5389626}.

Kojima et al. disclose applicant's claimed compound of general formula 1 as shown below.



**Claims 1, 2, 4, 7-10, 13, 16 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Uemachi et al., {JP 05135769}.

Uemachi et al. disclose applicant's claimed compound of general formula 1 as shown below. Also, see the compound in the abstract.



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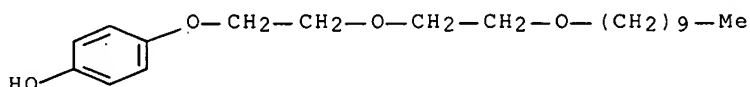
**Claims 1, 2, 4, 7-22** are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al., {WO 9308196}.

Takahashi et al. disclose applicant's claimed compound of general formula 1.

See the compounds in the abstract.

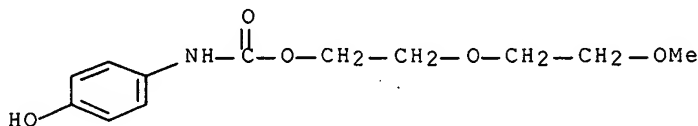
**Claims 1, 2, 4, 7-10, 13, 15 and 16** are rejected under 35 U.S.C. 102(b) as being anticipated by Carbon Paper Co., Ltd., {JP 57163596}.

Carbon Paper Co., Ltd. discloses applicant's claimed compound of general formula 1 as shown below. Also, see the compound in the abstract.



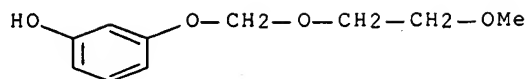
**Claims 1, 2, 4, 7-10, 13, 16 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Stammann et al., {EP 153642}.

Stammann et al. disclose applicant's claimed compound of general formula 1 as shown below. Also, see the compound in the abstract.



**Claims 1, 2, 4, 7-10, 13, 16 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Jayyosi et al., {WO 2000064876}.

Jayyosi et al. disclose applicant's claimed compound of general formula 1 as shown below. Also, see the compound in the abstract.



**Claims 1, 2, 4, 7-16 and 18-22** are rejected under 35 U.S.C. 102(b) as being anticipated by Faust et al., {DE 2822191}.

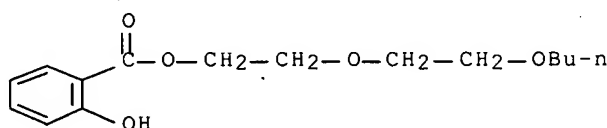
Faust et al. disclose applicant's claimed compound of general formula 1. See the compounds in the abstract.

**Claims 1, 2, 4, 7-16 and 18-22** are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al., {WO 9838152}.

Fukuda et al. disclose applicant's claimed compound of general formula 1. See the compounds in the abstract.

**Claims 1, 2, 4, 7-10, 13, 16 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Trautner et al., {US 4145342}.

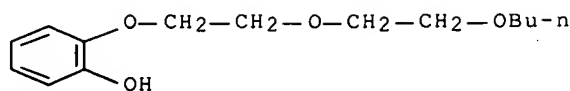
Trautner et al. disclose applicant's claimed compound of general formula 1 as shown below. Also, see the compound in the abstract.



**Claims 1, 2, 4, 7-10, 13, 16 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Morishita et al., {JP 51092831}.

Morishita et al. disclose applicant's claimed compound of general formula 1 as shown below. Also, see the compound in the abstract.





***Allowable Subject Matter***

Claims 24, 36 43-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.  
Patent Examiner  
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THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

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Thurman Page,  
Supervisory Patent Examiner.  
Technology Center 1600